

The
PROBLEM OF LIFE.

By Dr. John T. Scholl.

Ozaukee, Wis.

Jan. 24. 1877.

The proper plan to conduct one's life, depends on the expectancy of life. A man that does not enjoy good health, for him it would be useless to plan how to become rich for the purpose of enjoyment.

Every man should keep in view the object of attaining the most enjoyment that his bodily and mental constitution is capable of. If he has attained that, then he has comprehended the Problem of life. To make the most of one's Life should be the great aim.

The first thing to be done is to secure one's health. If health is lost the whole of Life may be frustrated. Health demands our first attention; no neglect even a slight one ought to be allowed on any account. If every thing is done to secure and maintain health, then the next consideration may be to secure money, or rather mental developement first, for the reason that a good intellect in connection with good health is the first requisite for attaining wealth.—

Our subject matter pertains to the following questions:

1. What plan should be followed to attain health?
2. What plan to attain learning?
3. What plan to secure wealth?
4. What is the plan to enjoy health, learning and wealth to meet the Problem of Life?

To have health, the laws of health have to be studied, to be understood, and to be obeyed. In order to have intelligence it is necessary to understand and obey the

laws of intelligence.

To attain wealth it is necessary to understand and obey the laws regulating wealth. To meet the Problem of Life is to have health, intellect & wealth & to enjoy & make the best use of them.

Hence we have to deal with the laws of health, intelligence & wealth. The laws which regulate health point to similar laws that regulate the intelligence and wealth, and that teach us enjoyment.

If I were to acquire my learning over again I would consult only such authors as have required an undoubted reputation, have a remote lineage, and that are acknowledged by the intelligent & the rich. This would be the only safe plan. Authors of doubtful value might produce a valuable idea but even this idea would be so much mixed with chaff that it would not pay the winnowing, and some things might be learned, that would require to be unlearned at some future day.

To find out these authors we must have resort to the periodicals of the world. We must not read everything, this would lead us too far, but whatever we read must be of sterling value.

2nd. We must read only that what we may use either improving our intellect, our means, or our health. If a certain kind of knowledge finds no such application at our hands although it might in the hands of others, then its acquisition would be a waste of time. For a physician it would be entirely useless to study minutely the chart of the ocean, because he could never make any use of the study.

An outline of such a study from a good author, would be useful as far as it tended to discipline and to prepare the mind for other studies.

In our studies it will never do to trust too much to our own plans & notions, they may seem good and plausible at first but they are apt to prove defective in

the end. Every man imagines, that what he thinks, is of most value and that nobody can think better. Every one thinks as good as he can and in accordance with the preparation his mind has undergone, and he is unable to think that there might be other persons that have learned more than himself, because he has no evidence of such persons, and no idea of their knowledge.

Thus it becomes necessary for us to study the labors of those that have gone before us, and who had minds similar to our own. In fact the human mind of the present, is only a repetition of the mind gone by. Their records must indeed be invaluable to us.

We must remember that, as we think, other persons have thought likewise. If we wish to be immortal, so have others wished the same in such a high degree that the wish has become an article of faith.

If we wish to have health, so have the generations done that went before us. If we wish to be rich, others have wished the same. If we wish to enjoy life, others have done the same. We must also consult the writings of such men as have gone before us and as have made a mark in the world. We must study the science of the subject whether written or not.

The next thing to be done is to resort to experiment. Where the well known ceases, the experiment or artificial experience is to begin. To experiment, spontaneous or induced, is due all advancement in learning and to nothing else. If then in any thing we are unable to consult our ancestors, we must develop the Idea by experiment. Many an hypothesis sounds very nice at first, but when tested by experiment, is to one prove useless and ridiculous. No implicit trust must be placed into one single experiment, if the experiment is ever so grand and costly as Drucker's Quarry for instance.

Many experiments are required to develop the pract-

icability of an hypothesis. Never expect success from your first attempt. Nothing is certain until it has been tried by experiment. Experiment is the Proof.

Hence, Study and experiment, Science and Art, Theory & Practice are, which conduct us to truth. Our object is the pursnit of truth but truth can not be reached except by study and experiment.

The laws of health and wealth must first be studied & next verified by experiment.

The great law of health is the adaptability of our organisms to outward conditions and influences. Is the adaption perfect, then there will be health, is this adaptation imperfect then there will be disease.

Any organism let it be weak or strong, small or large has a certain degree of adabtability which not being transcended will secure the enjoyment of good health. We must be careful to confine ourselves to our sphere of surroundings, the same as the shoemaker should stick to his last. We must know our milieu or medium and stay in it; to it we are adapted because we have constantly been subjected to its influence.

While this influence was gradual & by slow increment our organism was always able to respond to the stimulus (whether agreeable or disagreeable) we were subjected to. Any influence then to be not injurious must be small, gradual and proportionate so that, the organism can respond to it.

Just so it is with the people's intellect. It requires to be prepared by slow and small increments, in regard to time as well as to quantity.

One step is a preparation for another step which could never have been taken if the first had not been taken. Time and single steps give true advance. So it is with wealth. The wealth what you have, prepares you for the attainment of more.

It is the same with learning, that what you know

prepares you for attaining a higher degree of learning.

You cannot suddenly subject yourself to great changes of temperature, to a different mode of living, thinking and feeling without incurring disease or death. The mind can not undergo great mental action to which it is not accustomed and for which it has not been prepared, without mental shipwreck. So in wealth, nobody can attain wealth at a jump. The attempt would result in pecuniary shipwreck or bankruptcy.

One step at a time down a flight of stairs will produce no inconvenience; ten however taken at once might cause death. So with intelligence and wealth, a small step will be beneficial while a large one will kill.

The law for obtaining wealth is to attempt only a little more than what you have already succeeded in before, and what you can well survey from your present standpoint. It is easy enough to see a step before you, if however you were to take a hundred steps at one time; the place where your foot would land might be very insecure.

Hence you must be able to completely overlook your next field of operation. Your mind must be able to grapple with the whole affair. A whole business scheme must be looked upon as a single step.

As space and time are not limited so there can be no limitation of taking an advance step. Progress will exist forever. Progress can never cease, no more than that time & space can cease to exist. A step may hence always be taken in advance. The absolute or perfect cannot be attained. We may at present imagine that we have a perfect instrument, and so it may be at present, but the progress of the world will supplant it by something better adapted.

The known has no further attraction; that what you have acquired you crave no more; your wish is for that what is in advance of you.

The wealth you have gives you no pleasure nor pain, it is only when you have lost it that you realize its absence. After the house is burnt, the treasure lost, the friend dead, it is that you realize the want of them. In the case that you should never have had any of them, you would never have felt the want of any of them. But since you have them, you enjoy but a quiet possession and strive for more. It is quite natural that you should walk in advance, and feel sorry if you were thrown back on your old route.

To obtain success, is a means of happiness. Money is the measure of manual labor performed. It can hence not be obtained in any other way except by somebody's manual labor. It is therefore that money is so scarce. To get money in larger quantities than could be done by manual labor we must render services to others, which are equivalent to them, to multiplied manual labor, and thus command multiplied wages.

A Physician by saving 200 persons from being sick 2 weeks, would produce a work equivalent to $6\frac{1}{2}$ years, hence he ought to be entitled to a pay equal to 10 dollars a day or 3.500 per year. In no other profession can so much labor be saved to persons as in the medical profession.

A second way to save manual labor would be by the Manufacture of articles that could not be made so cheap by a person for himself; since they were made on the large scale with capital and machinery. This is employing the labor of others, of many hands, and securing to us a small profit on their labor while the consumer has to pay no more than what the article is worth. If the hands were to receive their full earnings, then it would only be the capital invested that would bring a profit.

Money can be made 1. by the use of the Muscles.
2. by the use of Intellect 3. by the use of Capital.

All what capital can bring on the average is 10 per cent, if it ever should bring more in a business or investment, the reason is that it just as often brings less.

It is also the uncertainty of the invested capital.

What makes capital worth no more than 10 per cent is its security.

In order to make capital bring more than 10 per cent an unusually large degree of intelligence has to be associated with the capital and this being seldom the case; the worth of capital stays at the level of ten per cent. To make the largest amount of money would be to combine the 3 principles for increasing wealth.

1. To Render labor equal to many.
2. To Profit from the labors of others.
3. To Use Capital with intelligence so as to bring out say 20 per cent.

If my plan of the Gesundheits-Bund had succeeded the above combination would have been effected.

MONEY.

Money is said to be a measure, or an instrument.

Now money is a little more than an instrument.

It is of a compound nature, it partakes of the measure and commodity. It may better be compared, to an apple, an orange or a bushel of wheat. An instrument can be used for doing work, its value is nominal compared to what work can be done with it. One bushel can be used 1000 times to measure wheat, so 1 dollar could be exchanged 1,000 times, in this case money would be an instrument of exchange but money is also a measure of value, containing the value itself. In order to obtain 10 dollars it will not do to exchange 1 dollar ten times but the 1 dollar measure or instrument has to be bought over and over again until we have 10 dollars. How can money be got?

Money is an instrument. Money is a measure,

Money is a seed, a plant, a tree; it will increase in value if properly put out on interest.

It is only when money is considered as a seed that more money can be made out of it without hard labor. By putting money out on interest, it is the desirability of the money that commands the premium called interest. The great hankering and need of it, the short comings of the people through sickness or laziness creates this desirability, Getting the money, being out of trouble for the time; this ease we are quite ready and willing to pay for with a premium called interest. It is the weakness, the shortcomings of the people, it is their moral diseases, that have reared interest on money. The interest money, is also the bill paid for a moral shortcoming, just the same as people pay for medicine on account of their physiological shortcomings.

It is the sluggishness of matter, the arrears that have to pay the penalty, to those that are in advance, The weak are oppressed by the strong, the quick by the slow. It is by oppression that any rise generally takes place.

If one beam rises the other must be depressed. If one man gets more than he earned, some other must lose its equivalent. The drops at the bottom of the sea support the drops at the top.

Just so it is in the ocean of life. One man may rise by his quickness, lightness, endurance or greater intellect, and while doing so others must sink in proportion.

Money can only be obtained by supplying the wants and desires of others cheaper or better than they could do for themselves, or what they could not do at all.

The principle desires of man are; Food and clothing, the relief of suffering, society and enjoyment, learning, strength, beauty, health, sound constitution, happiness & eternal life. The wants, created industry & progress.

RULES OF ACTION.

March. 1872.

Remember always that the time you spend at any thing whatever is worth money, this money value is of course different according as the earnings of the day vary. Supposing that a man can earn on the average \$5. per day then the hour would be worth 50 cents.

He would hence have to consider that the employment on which an hour was spent would return to him a value of 50 cents.

It will never do to ponder long over a thing where only a few cents are at stake. Nor will it do to lose the earning of an hour what is sure, to that what is very doubtful. Letters require to be quickly dispatched regardless of expense. For a few cents it would never do to ponder 10 minutes, every minute being worth a cent. Every minute spent in thinking, renders that what is done a cent dearer.

Instead of hunting long for labels it would be better to write to the manufacturers, which would cost 6 cents, but spare you 20 minutes time.

A man's time for learning, just for the sake of learning must be limited. After that, time should bring him a sufficient recompense. It would be poor economy, working at a machine for a month, and sacrificing by it 100 dollars, when the machine could have been bought for 50 dollars.

Before beginning anything new you should ask yourself the question: "Is that what I am going to do worth the time it will cost me?"

Anything what is not sure whether it will pay or not, has to be pursued as a recreation and not in the hours of labor, and should give place to any thing else of an urgent import.

1.) Whatever you want to do, dispatch it; time is money.

2.) Ask for what will be trouble to hunt up, from those that know, or that want to make money by it.

3.) Listen not to one, from the plurality, the true status may be elicited.

Remember all the world wants to make money. If you would decide, you must examine both sides.

October, 18th. 1872.

Constitute yourself a center.

There is constantly a change going on in the business of the world. What paid to day, might not pay to morrow: It might do for a laborer to bind books but not for a doctor.

A skillful general keeps his plans to himself so that his enemies or even his friends may not foil them.

A man may squander his life at a penny business so as not to have anything after all, it is hence necessary to discriminate (although discrimination will take time) whether the business will pay.

Understanding the Physical laws, a parallel could be drawn regarding the laws of wealth.—

Think what you can do most profitably to day, and not about that what is far off yet.

Curtail your wishes as you would your expenses.

If you wish more than you can get it will leave you annoyance.

Condemning others puts ourselves sometimes in a poor light.

Make no suggestions to suspicious persons.

Many persons can not bear to be reprimanded.

Excessive satisfaction creates antipathy while a gradually increased satisfaction increases the desire. The none satisfaction causes pain. Everything has a propitious hour.

Consider well the vibration of a string before you strike the next one, in order to produce harmony, otherwise a discord will be the consequence.

Mysticism exerts a great fascination over the minds and manners of the people.

Desires may be created that do not exist, thus are the appetites for strong drink, tea and coffee, for fine clothes and horses, for approbation and riches, for ease and enjoyment created.

The satiation of a desire is the cause of its return. An insufficient satiation increases the desire, but if long continued weakens it.

Possessions, whether material or psychical, are sometimes not worth the trouble of keeping.

LAWS OF NATURE.

Only one impression can be made on human nerves at a time; in order that one should be up another must be down. To produce a wave is also to produce a depression.

Time is the great healer of disease. The more remote an impression the less will be the effect. A wave will get smaller in the ratio of the distance from where the stone was thrown in. It is so with disease caused by a

single impression, it will get better of necessity of itself just as the square of the distance of time increases.

The world moves forward as a whole, a single man ever so illustrious, if lost, can put no stop to its motion. The loss of the individual does not kill the body corporate. The death of a limb, or of cells within the human body will not kill the compound individual.

Life is a war of the elements (cellular & molecular) if one member succumb the rest can not mind that, they have enough to do to take care of themselves.

With all things in life the further an impression recedes the less it will be felt. A friend, parent or lover removed will leave but little impression in a year or two. A Napoleon, a Jener, a Mott is of but little mourned to day.

Every failure will bring success a step nearer. A fail will make the stand more firm. Experience will teach the master.

The human body has a species of adaptability, to adapt itself to surrounding circumstances. Impressions often repeated lose their effect, if carried beyond a certain degree, the limit of normal action.

To produce a result two factors are essential, Force and Time.— It takes time for a crystallization to effect itself, for a cell to develope itself, for a growth to be effected.

A human being is hence, force associated with the element of time, both being in intimate liaison.

Molecule after molecule only can be superimposed, and only one at a time, and one after the other. No structure can exist without the element of time. —

DISEASE.

All diseases are caused by mechanical obstructions, they may be physical or paracritical, they may be organic or inorganic. The obstruction may be a culeculus or a white blood cell, inorganic in the former and organic in the latter case.

Obstruction is an inertia of matter, matter in motion has been arrested, and now this part acts as a hindrance to other parts in motion.

The cause of disease is an extraneous force, arresting matter in motion essential to life.

The disease itself is the obstruction.

The primary obstruction will cause secondary obstruction hence secondary diseases.

The primary obstruction if organic in its nature will die, and the elements of death will poison the system from resorption.

The primary obstruction may also if inorganic give rise to obstructions of an organic nature which may die, dissolve and poison.

Disease is also the exhaustion of the force with which matter moves, that is, matter deprived of its motion, matter arrested.

In the cure of disease the element of time is an important factor in connection with the cellular molecular force of the organism.

The human body is a perfect machine reproducing itself, all what art might be capable of doing would be to keep off extraneous, and obstructing influences and to give the body its proper nourishment.

Arsenic, Carbolic acid & Quinine by killing the white

blood cell may remove obstructions caused by such cells.

Water may remove mechanical obstructions caused by salts in the system.

Chemical solvents. Iodide of potassium, Bromide of potassium, Citrate of potassium may facilitate solution.

No disease can arise as long as no foreign force has acted on the organism, cold air as a body abstracts motion from the organism and thus produces disease. Or conditions may change so that the actions sufficient under ordinary circumstance are no longer sufficient under the altered circumstances to let normal action take place.

Thus the activity of the skin, throwing out formic acid in warm weather, is insufficient in a cold atmosphere, rheumatism results.

All diseases of a tubercular nature are caused, by the resorption of the products of membranous inflammation.

Sores or boils on the head will cause swelling of the cervical glands. Remedies most useful in skin diseases are also best in consumption: Alum. A'd. gallic Tannin, Carbolic acid, Quinine in Alunan. Citrate of alumina in N. Leider.

In disease it is necessary to keep up a certain tension of the remedy, its influence must not be suffered to pass off altogether or else serious symptoms may ensue.

As the effusion of lymph is the result of a prior fracture, just so is inflammation the result of an injury done to the parts.

EMBOLIA.

Since the blood is coagulated by carbonic acid, it is very probable that violent running, on account of not permitting a sufficient oxigenation of the blood, will cause capillary broncheal thrombosis, which being carried into the capillaries of the brain, cause embolia there and give rise to fever accompanied with inflammation of

the lungs. The skull may be compared to a bone. The brain represents the marrow.

NERVES REACT UPON THEIR CENTRES.

An irritation of a nerve end will produce a congestion at the centre. If slowly acting it will enlarge the nerve-centre & make it more irritable. If the stomach gets irritated by ipecac, the centres of vomiting in the spine get congested, if the teeth irritate the gums, the nerves will irritate the base of the brain and medulla oblongata & produce convulsions, cerebrites & such like as in G. child. Metritis, tape worm, ascarids and dyphtheritis of the bowels as in Kuhn, Wellenstein, Schemer may irritate the spine. A paralysis of nerve ends may also paralyze the centres, as was the case in the person struck on the nates by a shell. The torpidity of the bowels, caused by exhausting purges, is due to anemia of their spinal centre. The irritation of the nerve creates the centre.

Use, will develop the need of a thing, as is the case with the lady that uses Magnesia, or carb. soda; with the smoker that uses tobacco & the pill-taker who uses pills.

Being used to a stimulus, it will be a natural condition to be under its influence. Carrying the stimulus too far would again bring about nervous derangement; withdrawing it would cause depression.

The Phylogenesis of the blood is from the ocean, it was formed there. Thus it is that the bloodglobule has soda for its salts, and iron for its originating principle. The muscles were formed on the land, therefore they contain potash salts. The bones having lime for their bases where also formed in the ocean, while, so far as they contain the phosphate of lime, they originated on the land from the use of the cereals.

The amount of carbonate of lime in bones of animals would hence be an index to what the size of the animal was at the time it left the water.

THE BODY IS A COMPOUND ORGANISM.

The muscular tissue considered as an organism has its feelers, which feelers terminate in the brain, searching for motive force the papulum of muscular existence. It may be that when this nervous fluid, electricity of nervemovement is arrested that contraction takes place.

The human being may thus be looked upon as a complex being,

1) A nervous being, having its feelers terminate in the muscles.

2) A Muscular being having its feelers in the human brain.

3) A vascular being having its feelers in the Sympathetic ganglia.

4) A ganglionic nervous system independent of the brain.

5) A vegetable being as the liver, and other glands producing starch etc.

6) The Mineral substratum.

Complex structures are a deduplication of simple structures. Thus the sensorio-motor centre, is a superaddition to the exito-motor centre and the idea-motor centre stands highest of all.

Man's symphetic system is that of the lowest animal, of the oyster for instance. His spinal system is superadded and his cerebral system crowns the whole. The lower system can exist with out the higher but the latter cannot exist without the former.

The muscular tissue desires exercise and rest or its contraction and relaxation, just the same way as the stomach craves for the injection of food at stated intervals. If the muscles labor under a want of contraction then a general malaise will creep over the system just as unbearable as fatigue.

SLEEP.

Sleep, coma and lethargy are symptoms due to different degrees of cerebral pressure. This pressure may have an active and a passive origin. When due to the presence of a liquid, (whether between the layers of the arachnoid, or within the ventricles, or within the nervous sheathes or within the sheath of the neuroglia, or within the venous capillaries due to embolism or thrombosis) then it is secondary or passive. When due to a contraction of the longitudinal fibres of the cerebral capillaries, then their whole length would be shortened and the cerebral substance compressed in the capillary meshes. When a person is awake the cerebral activity, counteracts the contracting influence of the capillaries. But when this action has been exhausted either by work or opium, or veratrum, then the contracting influence of the capillaries due to the sympathetic system will manifest itself, it will act inhibitory. Ergot contracts also the capillaries of the brain as well as of other parts. In Mrs. H. its use was followed by extreme vigilance. Mrs. Bolling. Mrs. S. it frequently removed headache. In this case the circular fibres contract, and by elongating the capillary network the pressure is removed from the brain-cells by the expulsion of the blood from the brain and from its removing the pressure from the cells.

— WHY WE DIE. —

The Human machinery gets worse for its wear.

Not only organs that are visible to the eye may suffer a mechanical stretch, but just so those that can only be seen by the Microscope, thus, the capillaries carrying the blood become varicose, the gallduets become dilated, the bowels become adherent, contracted, dilated etc, it is the mechanical defects of the human machinery which bring about death.

Therefore disease is something interfering with the human or organic mechanism. We inherit the imperfect make of parts, we die by these parts not being any longer able to fulfill their functions.

LAUGHING.

There are some persons that can laugh or cry without any reason or provocation. A common occurrence may seem laughable to such a person. When they are asked for an explanation of their conduct, none can be given. Now since the brain is an inhibitory center it is almost certain that the brain of such persons is weak or not sufficiently developed. Inhibitory power is really will power. Laughing and crying argue hence either a weak brain or powerful and fine emotions. If the latter do not exist, the former must be assumed as true. It is very probable that either continued laughing or crying will develope brain centres, as is the case with every occupation or mode of life or period of existence as is the case with sex etc., giving rise to certain cerebrations. Organs in their prime keep the cerebral centres highly stimulated, and everything new receives a coloring from them, as things seen through a colored glass. The child looks at things through its stomach, the youth through his muscles etc.

M

MINERALISATION.

Everything in nature tends to mineralisation, the water enters not only into the composition of stones and salts, but its hydrogen and oxygen go to form organic products, and are thus rendered solid.

MEDICAL PHILOSOPHY.

I

OF DESTRUCTIVE INFLUENCES.

1. Of diminished arterial pressure, giving rise to dropsy, etc.
2. Of increased Arterial pressure, giving rise to hemorrhage, etc.
3. Of increased heat, giving rise to fever, delirium and convulsion etc
4. Of diminished heat, causing destruction of the bloodcell, embolism, etc.
5. Of diminished food, exercise, sleep etc, giving rise to anæmia, consumption insanity etc.
6. Of Increased food. Plethora, gout etc.

II

OF REGENERATIVE INFLUENCES.

WHERE TO FIND KNOWLEDGE.

What is below us is also in other respects above us. We wonder at the stupidity of the people in comprehending truths, thrust upon them & that they are not able to distinguish between the true & the false, between the phy-

sician and the quack. The trouble is they do not know where to look for the truth and there are but few that know and these few know more through friendship than through the effort of searching for it.

Now such a thing repeats itself with every one of us, there are lights above us, true and false, and there are but few of us that are able to distinguish between the man of sound learning, and the superficial plagiarist. To be wise is to look to some such genuine light, to watch their productions & assimilate them; other persons may say a smart thing but it won't pay the digression to listen to it, it consumes too much time, and because learning takes time, therefore impostors frequently foster their illusions upon the people.

Men of learning we have in Claude Bernard, Herbert Spencer and R. Virchow. Now, Claude Bernard knows the power of Spencer very well and he reads his works. The higher a person stands in the scale of learning the less will he be found out by the low. It is only those that stand a little below him that can find him out and they are but few.

—Hence learning is uncommon and little, because people do not know that they ought to look for it, and this because they do know where to look for it.

Storing the mind with knowledge is the work of one's self. Teachers and parents can show the way or present a model, but the student must invariably imbibe and digest the matter before it can become incorporated with his mind. An analogy we have in the digestion of food.

If the brain receives more impressions than it wants, or that it can use then the eye will deteriorate and become weak because the cerebral element will not exert any stimulus upon the growth of the eye. If hence the eye is taxed more than the brain can bear, then the eye is injured.

AN ATTEMPT TO CLASSIFY SCIENCE.

There is in nature nothing but matter in time on the one hand, and its absence or space on the other. Matter, by changing place in the course of time produces motion or force. Matter & force are positive, time and space negative. Matter may be considered by itself & it may be considered as affected by the element of motion, of time and of space.

1) Matter treated by the element of motion gives rise to analytical and synthetical knowledge. Thus all science is either analytical or synthetical.

2) Matter may be treated to the element of time, giving rise to historical knowledge, to present or scientific knowledge & to prophetic knowledge. Corresponding to past, present and future time.

3) Matter may be treated to the element of space. Space may be limited or universal and it may be particular. These treatments of matter being cross-treatments, are applicable, at least many of them, to a single subject.

Thus history may be local and universal in regard to space, special and general, in regard to subject, it may be past or present; it may be analytical or synthetical.

Matter treated analytically multiplies the sciences and makes them special, treated synthetically the sciences are unified as in philosophy.

Matter treated analytically or by division gives rise when the division is mechanical to Anatomy, Phytotomy etc.; when the division is chemical to Chemistry etc.

Before we arrive at the scientific analysis and synthesis of a science, we must develop it by observation and experiment. Hence a science may be in process of evolution or it may be finished, or it may even have arrived at the period of decadence. This division of science is also due to the element of time.

Knowledge embraces thus, history relating to the past or probable; discription of present existances or what is called natural history; the sciences, or what is demonstratable and the prophetical or that what is to come and possible.

History when it regards science treats of chronological developement of science, of its incipieny and growth. When it regards knowledge, & treats of the discription of men, it is biography; of writings, bibliography; of the writings of places or nations, literature; of doings, arts; of the beautiful, aesthetics; of places, geography.

The science of nature divides into Biology and Astrology. The former divides into Anthropology, Zoology and Phytology; the latter divides into Astrogeny or Cosmogeny, Geology etc.

Anthropology embraces: Anthropogeny. P h y l o g e n e s i s. Somatology, Psychology, Psychology of nations. Each of them may be general and special. The developement of a science may be chronological, geographical, national, psychological or logical.

Bibliographical knowledge should precede so as to furnish the fountain whence the best knowledge may be obtained. It should constitute the first step in all investigations of the unknown.

History is general, special or common & natural. General history includes: Ancient history preceding the fall of Rome; History of the Middle Ages reaching to the taking of Constantinople by the Tures; Modern History, extending until the year 1789 & Contemporaneous History.

Special History, embraces: of places, the History of Greece, Rome, England, etc; of beings, Biographies of men and of nations; of events, Wars and Conflagrations, Earthquakes and Upheavals; of times, Chronicles etc.

Special History, in regard to subject matter, divides into Religious, Political, Social, Artistic, Scientific and Philosophical History, every one of which may be again

subdivided. Natural History embraces Biology including Zoology, Botany, Mineralogy Geology, Paleontology etc.

LITERATURE. Literature constitutes the written monuments of the understanding. Literature has its history and its organs or periodicals. It is primitive or secondary in its nature, and it is divided into general & special.

General Literature may treat of that of the ancients or moderns. Special Literature may be national, as French or German, or it may be scientific; as, Medical, Theological or Juridical.

ART. Art in contradistinction with nature. Art may be subjective, objective and aesthetic. Subjective art denotes the creative force and ability of man. Objective art embraces the Maxims and rules of action. Aesthetic art embraces the imitation of the absolute idea the work of genius; and the imitation of nature, the work of talent.

Art considered as an impetus endeavors to harmonize the picture or representation with the object and to approximate truth as far as possible.

ARCHITECTURE treats of the forms of matter. Sculpture treats of form in regard to beauty. Painting essays to symbolize objects. These three are called the plastic arts. Language, Poetry and Oratory model human Ideas and form them into works of art; while Music constructs Harmony in the sphere of sound. These are also called flying arts.

The material or modelling arts are concerned with matter: The immaterial arts are concerned with movement.

AESTHETICS is the science of the beautiful. According to Schelling, the sensual existence should correspond with the idea. According to Hegel; The beautiful exists in the mind as an Ideal, and in art it finds embo-

diment. Art is the embodiment of the idea on account of necessity and irrespective of the idea of the beautiful.

One science may merge into another science and form a hybrid with it. Thus there is a Geography, Ethnography and Archeology of history; as well as there is a Historical Geography, Ethnography and Archeology and so with the whole round of the sciences.

Just as the young plant divides into branches just so it is with science. One science will branch off into two and so on, so that we are justified in assuming a *phylogenesis* of the sciences.

All written matter is divisible qualitatively into destructive, constructive and illustrative matter.

The destructive matter pulls down the old preexisting systems, carries on a Polemic against authors and their works, it is of little use to the learner. The other parts are wanted by the inquirer after truth.

While studying a science, say grammar for instance, every rule or dogma that has been stated and illustrated, should be given in a connected novel; especially the examples should be thus combined. The nine laws should next be compounded into higher laws, and these again into higher laws still, so that the conclusion would contain but a single law giving to the initiated student a key to the whole science.

It might be an easy way to learn if the example was given first, then its parts explained and a rule deduced therefrom.

Model of a Catalogue.

Name of work to the edge, comma or in heavy type or spaced: Or author, period.	Name of Author after a or	No. of v'ls. of 8vo, vol. 3d. Ed.	Na- me of a r. c. X 50	Y P- lish- er. A. Nisch bd, wald	Ex- plan at price (85.) e	Orig inal e	P- r
--	---------------------------	-----------------------------------	------------------------	----------------------------------	---------------------------	-------------	------

Polarity.

The circumambulant electric current produces polarity in its core. The nervous current also has a spiral motion; thus we may conclude from the analogy that the nerve cells also present a polarity. More than this, we may conclude that the surface of the brain represents one large end of a polarity while the internal limit of the encephalic matter constitutes an opposite polarity. It may be the same with the internal centres of the brain. Thus a dynamical force produces a static force or polarity. It is possible that there is a polarity corresponding to every stimulus applied to the human system; thus alcohol, tea and tobacco may have their polarities in the habit, in delirium tremens, tobaccoism, morphinism etc. The natural balance of a man may recide in his polarity being in correspondance with the usual stimulus if the polarity is depressed as in the withdrawal of a stimulus then the morbid condition of depression will ensue, is it increased, then excitement and fury will be the consequence.

The conclusions drawn from the nervous system might be extended to the muscular tissue in a modified form. Whatever conclusions may be drawn from electricity, po-

garding direct and reverse currents, they may be extended to every other force, caloric, luminous, resonant and nervous. The polarization of light may be to the luminous wave just the same what magnetism is to electricity.

Attention.

Attention is subject to strain in the same way that muscular organs are. The sensation of fatigue on the left side of my head is generally brought on by forced attention or strain. Attention is to sensation what the accomodation of the eye is to the sight.

Sensation.

Sensation is a property of the nerve cells. It cannot be a property of the soul (Geist) since it is impossible that the latter should feel, that is, that a force or a process should feel.

Consciousness.

Consciousness is the beholding by means of the internal sense, probably the thalami optici, the pictures or ideas stored up in the cortex of the brain. Consciousness is therefore constituted by the various movements of nature affecting our brains. Without light, sound, savor & movement, our consciousness would soon dwindle to naught.

Mental vigor and greatness depend on vigor and greatness of the body. The mind bears the relation to the body, what a flower does to its bush.

Thoughts are vibrations discharged from the cortical centres or centres of ideas. These centres being excited

to action by words or other impressions equivalent thereto, and are reflex action in their nature.

An impression received by an organ of sense may not reach consciousness at once but the impression may still float in the organ of sense, and appear again before consciousness until it may finally enter or be lost.

Impressions that have been fully perceived by consciousness, and passed through it into the cortex cerebri and been stored there as memory, may also reproduce themselves and pass into consciousness again and again, sometimes automatically and sometimes when solicited. The more insignificant ideas are most apt to reproduce themselves, and hinder the acquisition of knowledge.

While reading an article devoid of interest a secondary train of thought will be going on at the same time, so that only once in a while some part of the reading will enter consciousness. In this secondary train of thought are generally contained points that immediately interest us either in regard to the aversion of pain, or the invitation of pleasure. When such points are settled consciousness is again at liberty. Points imperfectly understood carrying hope or anxiety are the most pressing.

If the article we read finds no nucleus in our minds about which it may be stored, then it will create no interest and be probably lost, consequently it will prove no stimulus to further exertions.

While the impressions formerly received and stored in the cortical centres become the measure by which subsequent impressions are treated.

To have a perfect control over consciousness, so as to exclude from it all irrelevant trains of thought, would be a great achievement to the student. A student in possession of such a control would be able to follow an author right along, and more than that he would be able to exclude from consciousness the little petty annoyances that are constantly troubling weak minds and thus ren-

dering them unhappy. Such a student would be able to adjust his mental and emotional feed to suit his pleasure. The will may be concentrated upon a special point by writing and reading upon that point alternately.

Consciousness is to be compared to the light of day. It is a vibratory state of neural-molecules, the same as light is the vibratory state of ether-molecules. A person fainting will notice at first a state of darkness creeping over mind.

If an unhappy person has no other impression stored up in the cortical centres but unhappy ones, then only such can be stimulated to reenter consciousness. The will, in this case would be unable to act.

The will.

The will can do nothing except when there are two kinds of impressions in about equal proportions stored up. The will would in that case be something like the judgement, and its strength would depend the same as the judgement, on the presence of the two kinds of impressions. One kind of impressions would annihilate the will altogether.

A first knowledge is best conveyed in the concrete form, but is best remembered when referred to an abstract head. The brain is in a constant state of vibration through the nerves of sense and sensation, dispersed again through the nerves of volition, motion & nutrition.

Our thoughts are vibration of nerve-molecules. The brain is an inhibitory centre, proved by a decapitated animal. Willing is the annulling of this inhibitory influence in regard to certain nerves so that reflex action may take place through them. To will is hence to arrest the influence of the brain in a certain direction. It might be that willing was accompanied by a contraction of the bloodvessels of the part lasting for an instace.

I will to move my ear, but it will not move, there are also other things necessary besides willing and those are, nervous cortical centres.

When a person is in a passion he cannot master himself action will take place in one direction without hindrance, because one set of ideas only throng into consciousness. It is the muscular effort what tires, the moving of weight against gravity. The surplus vitality is let off and thus action becomes more & more difficult.

I can not will to do anything what I have not learned to do, I cannot play the piano until I have stored my brain with notes, I can not move my ear until I have created nervous centres adapted to said motion. The will must hence be educated in order to exist, because I have no criterion, to know that I have willed except by the effort produced. I can say that I will, but I am not willing for all that.

I want to strike a person, the motion of striking flashes before my eye, the nervous centre carrying the Idea of striking passes before my consciousness. This is quite involuntary, & if this passing before my eyes is powerful enough, it produces the motion, but sometimes other centres interfere and the motion is arrested or not carried into execution. Willing is hence by association, the excitement of a centre, created and nurtured by exercise, bringing the idea of motion before the mind. I see it pass before my eyes as if it was really happening, though not before my eyes, but before my internal sense. (whether this internal sense be an assemblage of the other senses or whether it is a special sense situated in the middle of the brain.) this passage is necessary before of an action is capable of being produced, though sometimes a contrary centre may interfere.

The will is hence a centre of motion by association, passing before consciousness, and thus inducing, if strong

enough a similar motion. The will is a motion what may result in action (hence an internal sensation), just as a resonator of Helmholtz will reproduce its equivalent sound; or as an electric current while passing, produces a contrary current in another but parallel wire. The will is just the same. We have also the will represented in the domain of sound and electricity. What is there in the domain of light corresponding to it?

Observation. Sept. 21th 1875.

Last night I dreamt: not being able to get ready quick enough some salve for Mr. B. and being called on by other persons for my attention, I became so irritated that I flung a knife in the partition right before Melrens.

Here the *will* was exerted rather in a reflex manner wholly incontrollable.

But the will did not pass over into muscular action, but other times such has been the case with my voice, frequently the words passing in my dreams were finally called out vocally.

The nerve cells partly create the organ.

The good eye of M. W. is peculiarly bright as well as enlarged in size, while the blind eye is but half the size of it. This is due not to the increased use the eye has been put to, but to the braincells which are anxious for luminous impressions. They have developed the organ to such a degree that it can partly do the labor of both. The cerebral cellular element striving for its existence induced a much greater growth of this eye.

This case is similar to where Dr. Mott ligated the innominate artery, the pulse still remained, being due to the cellular element of the arm making a powerful exertion to maintain its life by coaxing the supplementary circulation, Removing a kidney or seminal vessicle has a similar effect.

Light is a propulsive force.

The light diffused through space might possibly be the cause of gravitation since it is a propulsive force, now since least light is towards the centre of the earth, things would naturally have to move in that direction.

Bleeding produces the buffy coat.

Oct. 16th, '76.

Peter Kuhn was bled 2 o'clock P. M. 36 ounces. The blood showed no buffy coat. Six hours later he was bled again to the amount of 32 ounces. This time the blood presented the buffy coat well marked and the coagulum was smaller while the serum was increased.

Oct. 19th Mr. Poull was bled, who had been laboring a few days under fever accompanied with much headache restlessness and sleeplessness, to the amount of 16 oz. when he commenced to give signs in color and pulse that it was enough. The blood was very long in coagulating and did so but imperfectly, while the buffy coat appeared while the blood was yet flowing. The bleeding in Kuhn's case emptied the arteries and thus an inward current from the tissues took place, evident in the second bleeding.

In Poull's case the arteries must hence also have been dilated in order to allow the inward current. Hence in typhoid fever ergot might be the remedy par excellence in the first stage to contract the capillaries. In Poull's case the plasticity of the blood was also gone, showing that a ferment had entered the blood, very likely by the way of absorption from bowels. This antiplastic ferment might cause a direct debility of the bloodvessels and thus dilate them, even independent of the sympathetic nervous system.

Two drachms of fluid extract of ergot given in divided doses in 24 hours had the effect of reducing the tallness and frequency of the pulse as well as the headache and sleeplessness. If the dilatation of the bloodvessels would exceed a certain degree it is evident that in that case the veins would rapidly fill from the tissues, and those organs rich in bloodvessels would hence have to accommodate a much larger amount of blood than natural thus there would very soon be pressure exerted upon the brain, terminating in paralysis of the senses & of deglutition as in the case of Johnny Poulis and in the 2½ year child of Tholen's. The large amount of combustible matter in the blood would require a large amount of oxygen hence cause increased breathing, while combustion would go on even in the blood itself and not only in the tissues. Since the breathing would not furnish the required oxygen, the combustion would not go so high as to form urea and carbonic acid, which products not being readily eliminated would act as a poison on the system, & by their overabundance the organs would soon become clogged, while in a chemical way they would attack the nervous and other cells and deprive them of their necessary food. A little, will stimulate, but much will extinguish so it would be in regard to the brain and kidneys.

The process of dilation in the kidneys or brain would in the first instance act as a stimulus, the brain becoming delirious, the kidneys secreting an exceedingly heavy urine, loaded with the principles of combustion, while an increased quantity of this same dilation would cause pressure on the brain & urinary tubules so that an arrest of function would be the result.

If the process of dilatation commencing, should go on increasing, then delirium would soon be followed by coma and death. The check may result from the system reacting & causing a contraction, or the contraction

may be produced by a chemical introduced, say ergot or veratrum, or the poison ceasing to be reproduced and getting eliminated.

The system may react by the sympathetic nervous system becoming stimulated by the poison acting upon it directly or through the want of the tissues for nourishment stimulating said system.

Sundries.

A science should be treated at first analytically, and after all has been explained it should then be built up again, not in the way it was pulled apart, but by deducing rules or axioms more and more comprehensive.

A science does not exist complete in a students mind until it has thus analytically and synthetically been studied.

Grammar is so hard to learn on account of the disconnected morsels by which it is presented.

Adversity is a necessity and a blessing for a man, it brings out the faculties. M.

To any great undertaking the common people are more apt to raise objections or present opposition rather than aid.

Atmospheric pressure causes atrophy of the muscles when not used. Exercise is a force which goes to balance that of pressure.

The developement of the various organs should be in harmony with the uses to which they are applied a greater developement would be prejudicial.

FERMENT. Every ferment is an excretion of cells, thus there is a ferment every where through the human body.

Milk is the secretion of an organ, a nurishment not used by itself but by the offspring. Now it may be that

the juice going to nourish the cells as it is prepared from the blood is exactly the same kind of a fluid. So that milk may be a liquid preformed in the intercellular canals.

Everything man throws off is a virulent poison. Carbonic acid from the lungs, urine, feces, sweat, expectoration, these are the great carriers of disease. Therefore cleanliness is essential to life & health. Cholera is propagated by the dejections, scarlet fever by urine, sweat and cutaneous exfoliation. etc. etc.

The poison of perspiration is not in the salts perspired, but in that the salts are necessary to bring away the morbid matter which is animal in its nature. Is the skin obstructed with salts then the morbid element is also retained.

An impression often repeated will educate the brain to it, and lastly it will become easy and finally pleasant.

What are the diseases of the lowest forms of life?

Study them and go higher.

SYMPTOMS of disease ought to be observed under 2 conditions; 1) under the normal conditions and 2) under the condition of abnormal physical or mental strain. An organ while under strain will show disease when none is apparent in the normal condition. If a boy coughs after a little cold or exertion so is the reason because his lungs are so far diseased that they can not resist the impression. So it is with diseases of the heart, exertion will bring them out.

Science of wealth.

Overproduction by machinery of staple commodities is the cause of hard times.

May 10, 1876. John T. Kimball says a single pegging machine turns out more than a whole village of

cobblers 50 years ago. If it were not for the steamengine all the multitude lying idle would have plenty of employment. While California some years ago made much ado about Chinese cheap labor it inconsistently welcomed reapers, mowers and mining machinery which for cheapness and facility made even the China-man dear. So it goes through all departments of industry. The increased facilities for doing work increased the work to be done up to a certain degree, but the stitches that can be put into a dress have their limit and so with everything else. This point has been reached, and the facilities for doing work by machinery is so great that an army of men can be dispensed with. The war of 1860 and 1864 swallowed a great deal of the productions and thus the crisis was put off, but now the market has become overstocked, business had to stop and men were thrown out a labor.

TOPICS.

The historical method should be applied to the science of the filiation of the pursuits after wealth.

Principles should be put first and connected with individual doings for the sake of illustration.

Medical cases should illustrate a principle of the science. They should be put with some object.

To put up a set of remedies well calculated for family use without being quack medicines might be honorable and remunerative.

Write a special sociology of patients or a medical sociology.

METEOROLOGY.

Watery vapor diminishes the specific gravity of the air, the air on this account ascends and admits a wind from all directions, modified by the wind caused by the rotation of the air into a spiral. The earth's rotation is least at the poles and most at the equator, consequently

the wind would have to blow from the east if it were not for the cold current rushing in towards the warm air of the equator and while lacking behind giving rise to a northeast current. — The centre of the storm spiral, as it is moving slowly along 20 miles an hour, may be many miles in diameter. On the Atlantic coast the storms come from the East or Northeast. Near the large lakes they come from the Southwest or Northwest. While the movement of translation of the storm is 20 miles, its motion in the spiral about the storm centre may be eighty miles. In the northern hemisphere the motion of the spiral is in an opposite direction to the hands of the clock, while in the southern hemisphere it is in the same direction. The storm centre presents itself a calm. A storm may be contracting itself, increasing in velocity, while others are expanding or losing their velocity. When a condensation ensues, the velocity is increased, when it has been unloaded, the velocity lessens. Storms may follow in pairs like 2 grand waves on the ocean. The storms of our southeast coast are generally West Indian cyclones, reflected as a rule by the Alleghanies.

The will, like muscle acquires strength by training. A strong will, like a strong body ensures its possessor against disease, the former against insanity.

A training of all the faculties gives strength to the will. The training is accomplished either by compulsion or from mate desire. A degeneration of the faculties is accompanied by a degenerescence of the will also. Maudsley.

BRAINCENTRES.

A. Jour. M. Sciences 1875 1. Page 580. Newyork Society of neurology & electrology Committee found: Corresponding points of the 2 hemispheres influence sometimes the same muscles of the 2 sides. Electrification of the dura influences the same side. All the centres of motion for the limbs are situated about the frontal fissure.

Success.

Mental and Mechanical Structures.

What ever we do is a structure in a mental or physical sense and in order to do it properly all the entities or powers of the brain and of man should be properly consulted in their respective order, each power should bring itself to bear upon the product, in harmony with the other powers. In union is strength. The absolute perfection of a thing is in the proportion that the work corresponds to the well developed faculties of a man, while relative perfection would be measured by the development, though warped, of the person executing it. Every thing divides into form and contents, exterior and interior, plan and execution, just so the powers of the brain, a part of them as; language, color, size, form & weight, ideality, overtiness or urbanity, mirthfulness and hope belong to form, while to the contents may be reckoned Order, locality, acquisitiveness, adhesiveness, alimentiveness.

REGARDING RELATIONS.

Comparison, concentration, conscientiousness individuality, selfesteem, veneration, benevolence, calculation, causality.

Regarding *Perpetuation*: Eventuality, imitation, hope amativeness, philoprogenitiveness, constructiveness, cautiousness, secretiveness.

The powers of the brain require to be maintained in perfect cooperation, duties properly distributed and universally assisted, and directed to suit the energies of all.

Acquisitiveness thinks riches to be the chief stimulant to human action and equivalent to every thing in life. Therefore all the powers of the brain should assist in the acquisition of money.

ADHESIVENESS. Money can not make happy. Our

chief pleasure comes from the society of those dear to us. True friendship is the honey of life. Exercise that hearty affectionate liking for each other and all will be well.

ALIMENTIVENESS. The obstacle of human progress is the want of sufficient food. A badly nourished body or a dyspeptic stomach will brood all evils, and retard progress, a man in order to labor must be well fed. Therefore eating & drinking is the foundation of human happiness and progress.

AMATIVENESS. It is the opposite sex, the other half to complete our nature that we should deem worthy of affections, and to satisfy the deepest cravings of our nature. Love is the word which includes all of friendship and more.

APPROBATIVENESS. Splendor, decoration and solemnity in whatever we do. Our best enjoyment is a good reputation, fame and honor, the good opinion of others is worth more than riches; and is indispensable to prosperity.

BENVOLENCE. Life cannot be for anything else than happiness. The alliance of human society should contemplate the happiness of all parties interested. No happiness is so delightful as seeing happiness in others or bestowing it on them. This happiness is best attained by mutual self-sacrifice.

CALCULATION. To find out true happiness we must combine and permute all the elements which may enter into it so as to discover the best formula. Happiness is the harmony of numbers, a certain number of vibrations produce a sound and a multiple of that will produce an accord, just so it is with color. Number rules. Happiness is the proper succedents to defined precedents.

CAUSALITY. In the first case we must consider the thing proposed and in the second the means at our dis-

poor to accomplish them. We must be able to adapt means to the ends to be accomplished if happiness is to be the result. Evil influences have to be restrained and propitious ones encouraged. The plan must first be mapped out and then put into execution.

CAUTIOUSNESS. A thing of great importance requires cool deliberation and time; hurry will make you choose the worst. Better sit well enough alone and thus avoid unknown evils. Be sure there is safety in every new step you take.

COLOR, SIZE, FORM & WEIGHT.

Let everything have a material embodiment. Let the body be properly exercised, (by moving weight) houses properly constructed, suitable clothes made and an ornamental finish given to the whole. Happiness consists in being beautiful and in keeping your body well protected by splendid clothes and houses.

COMBATIVENESS. The value of a thing resides in the trouble it costs us to obtain it, therefore we must be willing to fight our way through all opposition so as not to be imposed upon and to avoid rebellions. Away with cowardice, the degree of courage measures the value of a man.

COMPARISON. The true way is to compare the resemblances and differences, and to limit the request of one desire by the demands of all the others. Happiness lies in the satisfaction of the whole man, and in the sacrifice of each individual demand. We must compare talents with duties and select for every place the proper man.

CONCENTRATIVENESS. Don't have too many irons in the fire or some of them will burn.

Don't fritter your time and attention away on many things. Always changing from one occupation to another is a most serious fault. Begin at one thing and stick

to it until completed. A drop, to wear a hole into a rock wants to be falling all the time in the same spot.

CONSCIENTIOUSNESS. Justice honor and right. Our system of education, theological doctrines, laws and codes, require to be adapted to the multitude, to secure the greatest good to the greatest number, with the least limitation of the freedom of the individual. Our happiness and prosperity must be based on right, otherwise it is only a sham. To do right is the best way to get influence, to secure respect and to acquire riches.

CONSTRUCTIVENESS. We want, homes, clothes, furniture, pictures, workshops and machines. The steam engine is the great civilizer of the age. We want to harness the powers of nature to our machines so as to do labor serviceable to man without consuming his energies, thus the happiness of humanity can be virtually advanced, instead of employing all his time, in drudgery for his support, he can spend now his leisure hours in the pursuit of pleasure and amusement.

DESTRUCTIVENESS. In order to build up we must first pull down the existing structures, remove trees, stones and rubbish. To let anything be in the way will only weaken the future structure. Just so in order to built up morality and human happiness would be to destroy all the evil doers and to put them out of the world. The gardner trims off the sickly and with vermin affected shoots so as to let the healthy ones grow.

Eventuality. History must be our guide in action, events long passed must be our instructors. Here we find all sorts of precedents, virtue, government, science and skill.

Firmness. What we determine we must adhere to as to law, vacillation brings no rewards.

Hope. Prosper we must, there is no such thing as fail.

Ideality. Things are charming and delightful in the degree that they are beautiful and excellent, a common dab of a picture will not delight, while one from the brush of an artist will please most exquisitely. Culture and refinement, the pursuit of the good and the beautiful is what man is in want of.

IMITATION. Always select a pattern, a model to work after. There is no use of inventing what is already known. We learn quickest by having a pattern before us. Do we want a penal code? Then we have that of Napoleon and Jeremia Bentham. Do we want a plan for the apportionment of duties? There we have the Fourierite plan of association, the Republic of Plato. Immense is the power of example.

INDIVIDUALITY. We must make provision for wealth, friendship, food, love, the good opinion of others, doing good, logical consistency, safety, pluck, a fighting organization, distribution of duties according to gifts, the squaring of all things by honor and justice, skillful construction of plans, annihilation of opposing forces and evil-doers, the lessons taught by history, firmness in what we plan, and faith in our success. We must further provide for comprehensiveness, and perfection of scope and design, following good examples and models, considering each part, especially full discussion, establishing the proper boundaries, intertwining our labors with mirth, properly arranging the parts, caring for the family & children, avoiding unnecessary publicity, honor to the deserving, worshipping God.

LANGUAGE. Expression is the only instrument by which we convey our thoughts and sentiments before putting them into execution. Language anticipates action, and allows a modification of actions as long as they have not been carried out. This urges the necessity of thoroughly debating our deliberations before putting them into practice.

Grammatical & Rhetorical, oral & written expressions requires cultivation.

LOCALITY. Everything should have its boundaries well defined, its subdivisions clearly made out. Thus in a proper division of labor resides the principle of human progress. Divisions and their location by maps is an important principle.

MIRTHFULNESS. The world is just what we make it, a heaven or a hell, as we look at it, through humor or despondency. A hearty laugh is the salt of life and a great stimulus to health. Our greatest troubles are those caused by ourselves, what use is there in fretting? Let us laugh and be merry, and tune our voice to song.

Order. System is the secret of success. Everything in its place, and in the right time. Symmetry delights.

Philoprogenitiveness. There is no use in reforming the old, we must turn our attention to the young, educate them properly and we will secure the happiness of the generations to come. In our children centre our greatest affections, therefore to see them happy will be the happiness of ourselves.

Secretiveness. The way to be successful is to keep your own secrets. If your plans are known, there will be some to oppose them and chagrine and troubles will betide you. The success of our schemes showers blessings upon us. Tools should not know the use they are put too.

Self-esteem. Don't hide your light under a bushel. Be determined to make your mark in the world. Cultivate independence and liberty. Slavery is the worst of all evils. Learn to depend on yourself, suffer no control but self-control, such as is always applied by self-respect. Know your powers, and cultivate personal dignity.

Time. Punctuality and regularity in everything is absolutely required in order to be happy. Meals, amuse-

ment, labor and rest. By using time properly a great deal more can be accomplished and such is equivalent to so much longer life. What we do and enjoy makes up our life. Everything else cuts it short. Chronology requires our careful study since by it only we are enabled to decipher the events of former ages correctly.

Tune. Music delights the heart of every man, it contributes very materially to our happiness, what can be sweeter than a well executed piece of music. The enjoyment of music is a heavenly enjoyment and does not partake of the grossness what other enjoyments do. Would you be happy, cultivate music.

Veneration. We must think well of, and venerate those that have cared for us in our infancy and helplessness, father & mother, brother and sister. We must also venerate the great and deserving, those that have promoted the welfare of mankind in general, who have proved themselves to have been the fathers and nursers of the race. God, the giver of all must not be forgotten. By trusting to the guidance of our superiors such as know better, or to God, we will secure our greatest happiness.

Every power of the brain requires an other power by which it is to be balanced or squared, for example; Aquisitiveness requires to be squared by honor and justice & by the comfort it is to bring.

The faculties may be divided into 1) those that plan & 2) those that execute.

Measure, Expediency, Adaptation, Utility, Applicability.

There must needs be a faculty of the brain what judges things as to their use to the individual. Money would be no use to a man that had already as much as he could use. Things have values only so far as they may supply a want. The use of a thing determines the desirability of it.

Now there must be a power, what takes cognizance of the wants of the system and how far measures will be necessary to supply them. In this case want would represent the measure and the means to ends. We have here to deal with a discernment of relationship, as; means to ends, cause to effect, form to contents, plan to execution, Idea & Ideal, model & imitation. These might be called necessary *Sequences*.

Good admits of better and of best. In Comparison things stand side by side, hence comparison takes place in *space* while causality refers to things following in succession, hence take place in *time*. The former is static, the latter dynamic. *Sequences* would suggest *Attendants*, or *associates*.

Actions by which people render themselves ridiculous.

✧ Boisterous laughter. Reading while others are talking. Leaving a stranger without a seat. A want of reverence for superiors. Receiving a present without some manifestation of gratitude. Making yourself the topic of conversation. Laughing at the mistakes of others. Joking others in company. Correcting older persons than yourself, especially parents. To commence talking before others are through. Answering questions when put to others. Commencing to eat as soon as you get to the table. Whispering or talking loudly in church, at a lecture or concert, or leaving before it is closed. Cutting or biting the finger nails in company or picking the teeth, or nose, pulling hairs therefrom. Drumming with the feet or fingers, or leaning back in a chair, or putting the feet upon furniture. Gazing at strangers or listening to the conversation of others when not addressed to you or intended for your hearing. Reading aloud in company without being asked, or talking, whispering, or doing anything that diverts attention while a person is reading for the edification of the company.

Musical Notation.

A NEW SYSTEM OF MUSICAL NOTATION

invented by Dr. John T. Scholl.

Ozarkée, Wis. Feb. 15, 1877.

The chromatic scale is named as follows: z s d f n v f g k m r b. Thus flats and sharps are named, what they were never before. The first octave has small letters, the second has capitals, the third has Italics & the fourth has Italic capitals. The base is named downwards in the same way. The length of the notes is indicated by vowels, thus i is equal to one-sixteenth, e to two, ä to three, a to four, ā to six, ō to eight, ū to twelve & on to sixteen-sixteenths, a whole note, n would mean one thirty-second and iā one sixty-fourth of a whole note. p stands for pause, l for lower & h for higher. When the object is to teach the science of music then the notes are also required to have a vowel sound, they are then represented as follows: i e ä a y ā o j o ō ū n. The type indicating the vowels of cords might be made so as to distinguish them.

When the left hand runs up into the treble a heavier type might show it. Piano may be indicated by skeleton type, and forte by heavy type. This system would make the different musical sounds into a language, which once learned would be easily remembered and compare well with language representing our ideas. Our ideas without language would be very limited, just as at present our science of music is.

Base and treble may be represented in one line united by a hyphen, so as to make them into compound words.

THE AIR OF THE BROOKLET reads thus: —

māri, Zava vavāgi, venena nanāvi, gaga māge, vu māri,
Zava vavāgi, venena nanāvi, gaga māge, vu gāmi, rara
Da Da, Za Za māme, Zaga gaza, mu māri, Zava vavāgi,
venena nanāvi gaga māge, vu.

To get the right lengthh of the notes it is a good way to repeat the vowel sound as often as it represents a sixteenth, which may afterwards be done so fast as to produce a coalescence of the separate sounds.

Music of the Brooklet.

z	s	d	t	n	v	f	g	k	m	r	b	—
i	e	ā	a	y	ā	oi	o	ō	ō	ū	u	ou
1	2	3	4	5	6	7	8	9	10	11	12	16

pa-pa, āvou-pamivamivamiva, izou-paginaginagina,
izo-parina izo-parina, āvou-pamiva-mivamiva,
āvou-pamivamivamiva, izou-paginaginagina,
izo-parina izo-parina, āvou-pamivamivamiva,
ūrou-parāvarāvarāva, āvou-pamivamivamiva,
izou-paginaginagina, āvou-pamivamivamiva,
āvou-pamivamivamiva, izou-paginaginagina,
izo-parinarinarina āvu-mivu.

The Brooklet.

pa-a, āvou-pamivaaa izou-paginaaa, izo-parina
izo-parina āvou-pamivaaa āvou-pamivaaa
izou-paginaaa izo-parina izo-parina āvou-pamivaaa
ūrou-parāvaaa āvou-pamivaaa izou-paginaaa,
āvou pamivaaa āvou-pamivaaa izou-paginaaa
izo-parina izo-parina āvou-mivu.

Florida.

At Palatka March 27 1876 oranges could be picked from the trees. The wild trees are planted as shade trees. The Thermometer is 80 in the shade. Bananas are abundant. The heat would be oppressive were it not for the cooling breeze wafted across the 2 miles expanse south and east of the place. Insect life is evidently more vigorous in this climate.

Cows are few and small, grass cannot be grown and milk sells at 25 cents per quart. Some German & Sweedish immigrants have settled here before & since the war, but the summer temperature has driven most of them further north. Still fruitraising & illhealth has attracted some of them and retained them. Half the population are negroes. The latter hold offices the same as the white.

St Augustin is a Spanish town. Just 361 years ago Ponce de Leon planted the cross at this place. The houses are built of coquina. A substantial sea wall built of coquina cabbled with Granite to defend it from the swells of the ocean. The island Anastasia stretches along the coast 1 mile from the shore forming a beautiful harbor. The heat of the day is tempered by a sea-breeze every forenoon.

Land close by the town may be had for \$15 to \$20 per acre and intelligent fruitgrowers have realized 1000 dollar per acre from their orange groves.

Jacksonville is situated on the St John's river which is 2 miles wide at this place. The St. John's being 1 to 6 miles wide and 300 miles long. On the other bank of the river is situated Mr Mitchels residence.

Kansas.

A. M. Sommers, Emporia, Kas. is Land Commissioner, for the Missouri Kansas and Texas Railway in the Neosho valley. Passengers are at liberty to step over on this road.

Jas. D. Brown, Sedalia, Missouri has charge of the passenger department of this road. Write for circulars, maps and for excursion tickets for 30 days.

T. J. Anderson, General Passenger Agent for the Atchison, Topeka and Santa Fe Railroad. A round trip ticket, through Arkansas valley, to Pueblo, Colorado springs, Denver, Canon City, Cuchares, Del Norte, Trinidad and Santa Fe for 50 dollars. Maps, timetables & the San Juan Guide etc. may be had for him.

Dr. C. K. Gifford, is General Agent for the Road at Terre Haute, Indiana. The *Neosho valley* has a climate unequalled by any portion of the country. Why drag out an existence in the North where the savings of the summer's work are used up during the long and tedious winter. Come where you can have orchards, vine yards and stockranges. The valley is 150 miles long and from 1 to 5 miles in breadth. It is well adapted to stock & fruitgrowing. The sky is clear and marshes are unknown.

STORMS AND FLOODS.

The Say levee below Quincy, Ills. and Hannibal Missouri gave way on the 17th. April 1876 mandating the Say bottom 100,000 acres of fertile lands, extending 5 miles into Missouri and 15 miles into Illinois. The inhabitants had to flee to the bluffs for their lives, houses and barns were carried away, railroad beds were undermined. The Quincy & Missouri track stands for 2 miles under water.

CHICAGO STORMS.

May 6th '76 at 5 p. m. a tornado struck the city. The steeple of Grace shurch 175 feet high, was brought down. The massive fogbell at the crib was swept into the lake together with the tower. Hacks and carriages were wrecked and abandoned, chimneys without number were overthrown. The Palmer house was damaged to the amount of 2.000 dollars. Six men were burried under the freight depot one of which will probably die. Damage $\frac{1}{4}$ of a million.

At 6:30 a car was blown from the track on the Illinois Central Railroad, many passengers were injured.

STORMS IN KANSAS.

May 6th half past 8 oclock A. M. a tornado struck the city of Leavenworth. It had been raining 60 hours, lightning had been flashing all night. Twenty five minutes past 8, a dense cloud was seen in the West, then a sharp breeze came up from the east which continued one minute, then came a dead calm and the rainfall ceased, then was heard the roaring of the tornado and in an other moment the wind was there, a flash of lightning and a crash of thunder making the earth tremble was next, then came the creecking of buildings, falling of walls and flying timbers. The Windcloud was funnelshaped small end below, it moved with an oscillating motion from West to East.

Damage $\frac{1}{8}$ or $\frac{1}{4}$ of a million. The Atchison, Topeka and Santa Fe Railroad track had to be abandoned on account of landslides and washouts.

Contracts & Agreements.

1858 R. S. 663, Must be in English. 613 A Lease for 1

year need not be in writing.

613. The contract, when for more than 1 year must be written, expressing a consideration and bearing the name of the grantor.

615 Conveyance is an instrument in writing by which an interest is created, alienated, assigned etc.

11. No State can pass laws to impair contracts. 25. Leases & Grants are void after 15 years. 82. Grantor passes over something to the Grantee.

537. Conveyance of an interest in land may be by deed, signed & acknowledged.

538. Covenants in a Conveyance are void.

538. A deed must have 2 Witnesses and an acknowledgment by N. Public.

544. A contract, witnessed and acknowledged may be recorded and be a bar to others.

Wisconsin State Historical society .

(Beriah Brown) Madison.

Vol. 1 Page 98. Between 1814 & 1818 the Indians ceded the Lead districts to the United States. After that the war department leased 200 square yards to the miners.

Page 18. The limestone formation of Greenbay and Lake Michigan, extends to this region, embracing copper ore of mineral Point and other places.

Vol. 2 for 1855. Calkins and Proudfit. Madison.

Page 485. Prospectors were governed by certain surface indications. The best were old Indian diggings. 2nd gravel mineral, indicating the existence of large quantities upon the highlands.

3. The *Amorpha canescens* or masonic weed, when found in a cluster of rank growth. The Indian diggings were principally marked by small aspen groves.

Vol. 3 1856 Calkins & Webb. Madison.

Lake superior miner, published at Ontonagon, Mich.

1862.

Little, Brown, & Co. 110 Washington St. Boston.

Curtis on Patents.....5.00

Parson's, Laws of Business.....2.50

" Mercantile Law.....5.50

Story's, Commentary's on promissory notes.....5.50

Taylor's Landlord & Tenant.....5.00

Walker's Introduction to American law.....5.50

Atwood & Duval, Journal Building Madison, Printers
of digest of the Laws of Wisconsin.

Sentinal, Milwaukee. Printers of the law & by laws of
the LaCrosse & Milwaukee Railroad Co.

MOORE'S LIMESTONE.

Aug. 29th '72. I measured the depth of the limestone at Moore's. The dip to the East was 5 inches minus 1-16th. for every 10 feet. To the South there was a slight rise, while towards the north the level was kept. The lower part of the 10 ft. being water worm, we might deduct $\frac{1}{2}$ inch and call the depth $4\frac{1}{2}$ inches for every 10 ft.

A mile has 5940 ft. the fall would hence be 222 ft. per per Mile. While if we would call the dip but 4 inches, the fall to the East would be 199 feet (say 200 ft.)

—Looking from another ledge of rocks the dip would be East of South East, which very likely is the true dip, as the shore of Lake Michigan would indicate.—

At another and former time I measured the E. S. E. dip and found it $7\frac{1}{2}$ inches per 10 ft. We will say 6 inches, then the fall would be 300 feet per Mile.

Jos. Altendorf's Lime Stone.

16 feet in an E. S. E. direction gave about 6 inches measured by the eye, this would make 185 feet per Mile.

At Jos. towards the barn the limestone is overlying

the quarry stone, we may hence conclude that this is the real boundary. If we would trace this boundary we would have to follow a South S. W. direction. The limestone at Moore's and that at Altendorf's barn is the same. At Altendorf's the limestone has been denuded completely, while this is not the case at Moore's.

But since the limestone gets more crystalline as we go N. W. as far as the little creek it is likely that the quarry stone is not much deeper. The top at Moore's is more crystalline blue and earthy, while further back and deeper it becomes more crystalline. So it may be possible that in going deeper, we might get to the quarry-stones. The quarry stones towards the barn are just as subcrystalline, and even in the quarry itself such a place is found, which Joseph call's limestone.

—Jos. quarry being $3\frac{1}{4}$ Miles the strata running S. S. W. it would crop out $1\frac{1}{2}$ miles from Town.

Or if the strata was denuded 200 or 300 feet it would crop out near Town.

I noticed quarry stone opposite Talacson's near Bau-shelds, also on the North side of the hill on the North of the supposed old river bed, bringing the waters of the Saukville river to Town. The quarry stone ought also to be cropping out on the speculators lands.—

INFIDILITY.

Sept. 4th. 1873.

Friends may change and prove unfaithful when occasion presents. Patients may lie if their purposes seem to be furthered thereby. Instances have been furnished in the persons of Dicks, Dengel, L. Landhold, Bausterd, Wentink of the former class, & Mrs. Victor & M. Ganke etc of the other class. A. Meyer saw compulsory measures in the Bund.
